

Attorney's Docket: 2004DE105  
Serial No.: 10/690,828  
Art Unit 1755  
Response to Office Action Mailed 08/16/2007

REMARKS

The Office Action mailed August 16, 2007 has been carefully considered together with each of the references cited therein. The amendments and remarks presented herein are believed to be fully responsive to the Office Action. Accordingly, reconsideration of the present Application in view of the following remarks is respectfully requested.

Applicant has amended the claims to attend to housekeeping matters and to more clearly describe the invention. Claim 1 was amended to recite that the pigment composition comprises more than 15% by weight, based on the overall weight of the pigment composition, of mixed crystals of C.I. Pigment Yellow 74 and the at least one monoazo pigment of the formula (1) and wherein the mixed crystals contain between 70 and 99.9 mol% of Pigment Yellow 74 and between 30 and 0.1 mol% of the at least one monoazo pigment of the formula (1). Support for the amendment to claim 1 may be found in originally filed claims 5 and 9. Claims 5 and 9 were canceled. It is believed that no new matter has been introduced by this amendment.

Claims 1 - 8 and 10 were rejected under 35 U.S.C. 102(b) as being anticipated by Hamilton et al. US Pat. No. 4,457,783 (herein after referred to as "the '783 Patent"). The rejection of claim 1, as amended under 35 U.S.C. 102(b) as being anticipated by Hamilton et al. US Pat. No. 4,457,783 should be withdrawn for the reason that the '783 Patent does not disclose all of the elements of Applicant's invention. As amended, claim 1 included the elements of claims 5 and 9 wherein the pigment composition comprises more than 15% by weight, based on the overall weight of the pigment composition, of mixed crystals of C.I. Pigment Yellow 74 and the at least one monoazo pigment of the formula (1) and wherein the mixed crystals contain between 70 and 99.9 mol% of Pigment Yellow 74 and between 30 and 0.1 mol% of the at least one monoazo pigment of the formula (1), and thus can not be

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said to be anticipated by the '783 Patent. It is fundamental that all elements of a claim must be found united in the same way to perform the identical function for a reference to establish anticipation. Anticipation is a technical defense which must meet standards: Unless all of the same elements are found in exactly the same situation and united in the same way to perform the identical function in a single prior art reference, there is no anticipation. Unless all of the elements of a claimed invention can be found in a single reference, it cannot be said that such a claim is anticipated by that reference. Therefore, the rejection of claim 1, as amended under 35 U.S.C. 102(b) as being anticipated by the '783 Patent should be withdrawn for the reason that the '783 Patent does not disclose all of the elements of Applicant's invention. The rejection of claims 2-8, and 10 under 35 U.S.C. 102(b) as being anticipated by Hamilton et al. (US Patent No. 4,457,783) should be withdrawn for the reasons given in support of claim 1 from which they depend.

Claims 1 - 8 and 10 were rejected under 35 U.S.C. 102(b) as being anticipated by Vermoortele et al. (US Pat. No. 6,261,354) (herein after referred to as "the '354 Patent"). The rejection of claim 1, as amended under 35 U.S.C. 102(b) as being anticipated by Vermoortele et al. (US Pat. No. 6,261,354) should be withdrawn for the reason that the '354 Patent does not disclose all of the elements of Applicant's invention. As amended, claim 1 included the elements of claims 5 and 9 wherein the pigment composition comprises more than 15% by weight, based on the overall weight of the pigment composition, of mixed crystals of C.I. Pigment Yellow 74 and the at least one monoazo pigment of the formula (1) and wherein the mixed crystals contain between 70 and 99.9 mol% of Pigment Yellow 74 and between 30 and 0.1 mol% of the at least one monoazo pigment of the formula (1), and thus can not be said to be anticipated by the '354 Patent. It is fundamental that all elements of a claim must be found united in the same way to perform the identical function for a reference to establish anticipation. Anticipation is a technical defense which must meet standards: Unless all of the same elements are found in exactly the same situation and united in the same way to perform the identical function in a single prior art reference, there is no anticipation. Unless all of the elements of a claimed invention can be found in a single reference, it cannot be said that such a claim is

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anticipated by that reference. Therefore, the rejection of claim 1, as amended under 35 U.S.C. 102(b) as being anticipated by the '354 Patent should be withdrawn for the reason that the '354 Patent does not disclose all of the elements of Applicant's invention. The rejection of claims 2-8, and 10 under 35 U.S.C. 102(b) as being anticipated by Vermoortele et al. (US Patent No. 6,261,354) should be withdrawn for the reasons given in support of claim 1 from which they depend.

Claims 1 -10 were rejected under 35 U.S.C. 102(b) as being anticipated by Dongzhi et al. (An Investigation Into the synergism of Monoazoacetoacetanilide Pigments). The rejection of claim 1, as amended under 35 U.S.C. 102(b) as being anticipated by Dongzhi et al. (An Investigation Into the synergism of Monoazoacetoacetanilide Pigments) should be withdrawn for the reason that the Dongzhi publication does not disclose all of the elements of Applicant's invention. As amended, claim 1 included the elements of claims 5 and 9 wherein the pigment composition comprises more than 15% by weight, based on the overall weight of the pigment composition, of mixed crystals of C.I. Pigment Yellow 74 and the at least one monoazo pigment of the formula (1) and wherein the mixed crystals contain between 70 and 99.9 mol% of Pigment Yellow 74 and between 30 and 0.1 mol% of the at least one monoazo pigment of the formula (1), and thus can not be said to be anticipated by the Dongzhi publication. Applicant notes that the Dongzhi publication discloses that a mixture of PY 74 and PY 65 is a physical mixture where there is no synergistic effect between the components (See page 72, first section, last 3 lines) and further discloses that the mixed synthetic pigment system of A + D (monoazo pigments not encompassed by the instant invention) forms a solid solution(i.e., a mixed crystal) over a large range of compositions, while the synthetic pigment system G + F (equivalent to PY 74 + PY 65 ) only exists as a eutectic mixture of two components (i.e. a physical mixture). In Applicant's Specification, Applicant defined the term mixed crystal at page 4 as follows:

"By mixed crystals for the purpose of the present invention are meant also solid solutions. The properties of mixed crystals differ both from the properties

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of the individual components and from the properties of the physical mixtures of the individual components."

It is fundamental that all elements of a claim must be found united in the same way to perform the identical function for a reference to establish anticipation. Anticipation is a technical defense which must meet standards: Unless all of the same elements are found in exactly the same situation and united in the same way to perform the identical function in a single prior art reference, there is no anticipation. Unless all of the elements of a claimed invention can be found in a single reference, it cannot be said that such a claim is anticipated by that reference. Therefore, the rejection of claim 1, as amended under 35 U.S.C. 102(b) as being anticipated by the Dongzhi publication should be withdrawn for the reason that the Dongzhi publication does not disclose all of the elements of Applicant's invention. The rejection of claims 2-8, and 10 under 35 U.S.C. 102(b) as being anticipated by Dongzhi et al. (An Investigation Into the synergism of Monoazoacetoacetanilide Pigments) should be withdrawn for the reasons given in support of claim 1 from which they depend.

Claims 11 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Vermoortele et al. (US Pat. No. 6,261,354) (herein after referred to as "the '354 Patent"). The rejection of claims 11 and 12, which depend from amended claim 1, under 35 U.S.C. §103(a) as being unpatentable over Vermoortele et al. (US Pat. No. 6,261,354) (herein after referred to as "the '354 Patent") should be withdrawn for the reason that no one skilled in the art would be able to arrive at Applicant's invention based solely on the disclosure of Vermoortele. The '354 Patent is limited to a transparent pigmentary composition for use as a colorant in general purpose printing inks. The '354 Patent is silent on any special additional properties and/or physical characteristics required in a pigment composition which is suitable or could be successfully employed in an inkjet ink system. Applicant discloses specific requirements for such an inkjet ink in a pigment composition in Applicant's Specification at page 1, lines 10-24, wherein it is stated that fine division of the pigment is required to prevent clogging of the nozzles to achieve high transparency and to achieve the desired hue. There is no mention in the '354 Patent of a

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requirement for a fine division of the pigments in specific proportion of mixed crystals having a specific range of composition of the PY 74 and the at least one monoazo pigment as claimed in amended claim 1. Thus, anyone skilled in the art having the problem of the Applicant to provide a pigment composition for inkjet ink systems and armed only with the '354 patent would find no teaching or direction to successfully provide such a composition. Furthermore, Applicant's crystals are highly transparent and exhibit the desired hue which is a greenish yellow rather than a reddish yellow (See Applicant's Specification at page 2, lines 16-19, at page 5, line 16, and at page 22 in Table 1 showing data for dH (hue)). The '354 Patent discloses a mixture of PY 74 and PY 65, but, the reference discloses in col 4, last 3 lines that "the product has [T]heological properties which are inferior to those of Example 1 (Table 1) which implies a high viscosity. Applicant notes that if a viscosity is too high for normal or customary printing processes, one skilled in the art of inkjet printing would be discouraged from using such a high viscosity composition because of potential clogging problems in the inkjet nozzles. Still further, the '354 patent is silent on the use of any mixed crystals and the '354 Patent describes its pigment composition as being "much redder" than individual PY 74 (See Col 4, last line). Applicant's mixed crystal pigment composition exhibit an unexpected "greenish hue" which is evidence of synergistic behavior between the PY 74 and the at least one azo pigment according to formula (1). Therefore, the rejection of claims 11 and 12, which depend from amended claim 1, under 35 U.S.C. §103(a) as being unpatentable over Vermoortele et al. (US Pat. No. 6,261,354) should be withdrawn for the reason that no one skilled in the art would arrive at Applicant's invention based solely on the disclosure of the '354 Patent, because there is no teaching or suggestion in the '354 Patent to provide a pigment composition having more than 15% by weight, based on the overall weight of the pigment composition, of mixed crystals of C.I. Pigment Yellow 74 and the at least one monoazo pigment of the formula (1) and wherein the mixed crystals contain between 70 and 99.9 mol% of Pigment Yellow 74 and between 30 and 0.1 mol% of the at least one monoazo pigment of the formula (1), which is required to overcome Applicant's problem of providing an inkjet ink.

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Claims 11 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Dongzhi et al. (An Investigation Into the Synergism of Monoazoacetoacetanilide Pigments)(herein after referred to as "Dongzhi et al."). The rejection of claims 11 and 12, which depend from amended claim 1, under 35 U.S.C. §103(a) as being unpatentable over Dongzhi et al. (An Investigation Into the Synergism of Monoazoacetoacetanilide Pigments) should be withdrawn for the reason that as discussed hereinabove, the compositions disclosed in Dongzhi are not synergistic mixtures and therefore specifically teach away from Applicant's invention. Applicant notes that the Dongzhi publication discloses that a mixture of PY 74 and PY 65 is a physical mixture where there is no synergistic effect between the components (See page 72, first section, last 3 lines) and further discloses that the mixed synthetic pigment system of A + D (monoazo pigments not encompassed by the instant invention) forms a solid solution(i.e., a mixed crystal) over a large range of compositions, while the synthetic pigment system G + F (equivalent to PY 74 + PY 65 ) only exists as a eutectic mixture of two components (i.e. a physical mixture). Therefore, rejection of claims 11 and 12, which depend from amended claim 1, under 35 U.S.C. §103(a) as being unpatentable over Dongzhi et al. (An Investigation Into the Synergism of Monoazoacetoacetanilide Pigments) should be withdrawn for the reason that Dongzhi teach away from Applicant's invention.

Accordingly, favorable reconsideration and an allowance of all pending claims are courteously solicited.

An early and favorable action is courteously solicited.

Respectfully submitted,



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